Q1. What is the purpose of Python's OOP?

Ans: Object-Oriented Programming makes the program easy to understand as well as efficient. Since the class is sharable, the code can be reused. Data is safe and secure with data abstraction. Polymorphism allows the same interface for different objects, so programmers can write efficient code.

Q2. Where does an inheritance search look for an attribute?

Ans: n inheritance search looks for an attribute first in the instance object, then in the class the instance was created from, then in all higher superclasses, progressing from left to right (by default). The search stops at the first place the attribute is found.

Q3. How do you distinguish between a class object and an instance object?

ANS

A class is a type of blueprint that you can use to make objects. A concrete 'thing' that you constructed using a certain class is an object, which is an instance of a class. So, while the terms 'object' and 'instance' are interchangeable, the term 'instance' refers to an object's relationship to its class

Q4. What makes the first argument in a class’s method function special?

Ans:

Whenever you call a method of an object created from a class, the object is automatically passed as the first argument using the “self” parameter. This enables you to modify the object's properties and execute tasks unique to that particular instance.

Q5. What is the purpose of the \_\_init\_\_ method?

Ans: The \_\_init\_\_ method lets the class initialize the object's attributes and serves no other purpose. It is only used within classes

Q6. What is the process for creating a class instance?

Ans:  
When you create an object, you are creating an instance of a class, therefore "instantiating" a class. The new operator requires a single, postfix argument: a call to a constructor. The name of the constructor provides the name of the class to instantiate.

Q7. What is the process for creating a class?

Ans:  
Classes are created using class keyword.

A colon (:) is used after the class name.

The class is made up of attributes (data) and methods (functions).

Attributes that apply to the whole class are defined first and are called class attributes .

Attributes can be accessed using the dot (.)

Q8. How would you define the superclasses of a class?

Ans: The class from which a class inherits is called the parent or superclass. A class which inherits from a superclass is called a subclass, also called heir class or child class. Superclasses are sometimes called ancestors as well.